

RECEIVED

CENTRAL FAX CENTER

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 09/966,407

Title: SELECTIVE COMMUNICATION IN A WIRELESS NETWORK BASED ON PEER-TO-PEER SIGNAL
QUALITY

Attorney Docket No. 10012345-1

AUG 21 2007

IN THE CLAIMS

1. (currently amended) A method of identifying and prioritizing wireless network devices, the method comprising:
detecting a signal from one or more wireless network devices, wherein each signal has at least one signal quality;
querying for supplemental information from each of the detected wireless network devices;
identifying each of the detected wireless network devices that match a selection criteria using the supplemental information;
in response to identifying each of the detected wireless network devices that match the selection criteria, associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria; and
prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality.
2. (original) The method of claim 1, wherein detecting a signal from one or more wireless network devices further comprises broadcasting a request from a reference network device and detecting a response from the one or more wireless network devices.
3. (original) The method of claim 1, wherein the at least one signal quality includes a signal quality selected from the group consisting of a signal strength, a signal noise and a signal-to-noise ratio.
4. (original) The method of claim 1, wherein identifying each of the detected wireless network devices that match a selection criteria comprises at least one selection criterion selected from the group consisting of device type, device name, device features, device capabilities, device status, past device performance, available consumables, transaction costs and device permissions.

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 09/966,407

Title: SELECTIVE COMMUNICATION IN A WIRELESS NETWORK BASED ON PEER-TO-PEER SIGNAL
QUALITY**PAGE 3**

Attorney Docket No. 10012345-1

5. (previously presented) The method of claim 1, wherein identifying each of the detected wireless network devices that match a selection criteria further comprises:
generating a data structure comprising the supplemental information associated with the detected wireless network devices; and
searching the supplemental information to identify those detected wireless network devices that match the selection criteria.
6. (original) The method of claim 5, wherein associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria further comprises associating each at least one signal quality with its respective wireless network device in the data structure prior to searching the supplemental information to identify those detected wireless network devices that match the selection criteria.
7. (original) The method of claim 1, wherein prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices using a first sort order based on a first signal quality and using a second sort order based on a second signal quality.
8. (original) The method of claim 1, wherein prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices that match the selection criteria based on a signal strength of the received signal such that the wireless network device associated with the highest signal strength receives the highest priority.
9. (original) The method of claim 1, further comprising:
establishing communication with the wireless network device that matches the selection criteria and has the highest priority.

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 09/966,407

Title: SELECTIVE COMMUNICATION IN A WIRELESS NETWORK BASED ON PEER-TO-PEER SIGNAL
QUALITY

PAGE 4

Attorney Docket No. 10012345-1

10. (original) The method of claim 1, further comprising:
providing a list of the prioritized wireless network devices that match the selection
criteria to a user; and
establishing communication with a wireless network device selected from the prioritized
list by the user.
11. (original) The method of claim 10, further comprising:
highlighting a portion of the list of prioritized wireless network devices based on a signal
quality of the detected signals.
12. (currently amended) A method of identifying and prioritizing wireless network devices,
the method comprising:
for one or more wireless network devices:
detecting a wireless network device, wherein the wireless network device
transmits a signal having a ~~first~~ signal quality;
querying the wireless network device to determine whether it is of a desired type;
querying the wireless network device to determine whether it has a desired status;
and
associating the ~~first~~ signal quality with the wireless network device when-in
response to determining that it is of the desired type and it has the desired
status;
generating a list of wireless network devices that are of the desired type and have the
desired status; and
prioritizing the list of wireless network devices based at least on their associated ~~first~~
signal quality.
13. (currently amended) The method of claim 12, wherein the ~~first~~ signal quality is
indicative of a relative distance to the transmitting device or a presumed quality of
service available from the transmitting device.

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 09/966,407

Title: SELECTIVE COMMUNICATION IN A WIRELESS NETWORK BASED ON PEER-TO-PEER SIGNAL QUALITY

PAGE 5

Attorney Docket No. 10012345-1

14. (original) The method of claim 12, wherein the signal transmitted from each wireless network device further has at least one additional signal quality.
15. (original) The method of claim 12, further comprising:
establishing communications with the wireless network device of the prioritized list of wireless network devices that has the highest priority.
16. (original) The method of claim 12, further comprising:
providing the prioritized list of wireless network devices to a user; and
in response to a user selection of one of the wireless network devices of the prioritized list of wireless network devices, establishing communications with the selected wireless network device.
17. (original) The method of claim 16, wherein a portion of the prioritized list of wireless network devices is highlighted based on a second signal quality of the transmitted signals.
18. (currently amended) A computer-readable medium having computer-readable instructions stored thereon capable of causing a processor to perform a method, the method comprising:
for each of one or more transmitting wireless network devices, receiving a signal,
wherein the signal has at least one signal quality;
querying for supplemental information from each wireless network device associated with a received signal;
~~associating each at least one signal quality with its respective wireless network device and its supplemental information;~~
comparing the supplemental information with a selection criteria to determine whether any wireless network device matches the selection criteria; ~~[[and]]~~

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 09/966,407

Title: SELECTIVE COMMUNICATION IN A WIRELESS NETWORK BASED ON PEER-TO-PEER SIGNAL
QUALITY

PAGE 6

Attorney Docket No. 10012345-1

if a wireless network device matches the selection criteria, associating that wireless network device and its supplemental information with its at least one signal quality; and prioritizing that each wireless network device matching the selection criteria against other wireless network devices matching the selection criteria, wherein the prioritization is based on the at least one signal quality for each of the wireless network devices matching the selection criteria.

19. (original) The method of claim 18, wherein the at least one signal quality comprises a signal strength and wherein the method further comprises:
prioritizing the wireless network devices based on signal strength; and
establishing communications with the wireless network device having the highest signal strength.
20. (original) The method of claim 19, further comprising:
attenuating each received signal if at least one of the received signals is saturated.